



Faculty of Cognitive Sciences and Human Development

## **UNIMAS' STUDENT'S CONCEPTIONS OF LEARNING**

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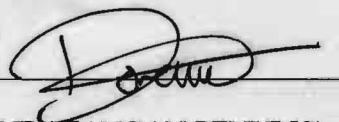
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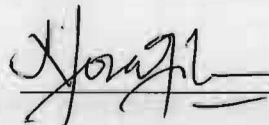
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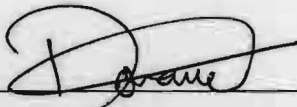
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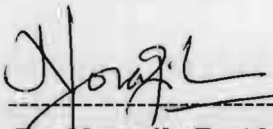
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## LIST OF ABBREVIATION

### **FMHS:**

Faculty Of Medicine And Health Science

### **FSS:**

Faculty Of Social Science

### **COLI:**

Conception of Learning Inventory

## **ABSTRACT**

### **UNIMAS' STUDENT'S CONCEPTIONS OF LEARNING**

Zuresty Pottena Anak Gary

This study aims to identify conceptions of learning that exist among UNIMAS' students. Specifically, this study attempts to identify which conceptions of learning is mostly held and least held by students in the selected group. In addition, differences in conceptions of learning based on genders and disciplines of study in C1, C2, C3, C4, C5, C6 also being identified (C1:Gaining knowledge; C2:Remembering, Using, Understand Information; C3:Duty; Personal Change; Process not Bound by Time or Place; Social Competence ). 145 students were randomly selected from Faculty of Medicine and Health Science (FMHS) and Faculty of Social Science (FSS) in UNIMAS to take part in this research. Data was collected through a survey questionnaires which taken from Conceptions of Learning Inventory (COLI) by Purdie & Hattie (2002). The results showed that students from both faculties mostly conceive learning as personal change and least conceive learning as a process not bound by time or place. The finding find that there is no significance difference between conceptions of learning and genders. It was also found that there is significance difference between disciplines of study in conception of learning as remembering, using and understanding information (C2) and conception of learning as personel change (C4). This study concluded that conceptions of learning are important to be identified among undergraduates students to facilitate their learning process at the university.

## **ABSTRAK**

### *Konsepsi Pembelajaran Mahasiswa-Mahasiswa UNIMAS*

*Zuresty Pottena Anak Gary*

*Kajian ini bertujuan untuk mengenal pasti konsepsi pembelajaran yang ada di kalangan mahasiswa-mahasiswa UNIMAS. Secara spesifik, kajian ini menyelidik konsepsi pembelajaran yang paling kerap dan paling jarang digunakan oleh pelajar di dalam kumpulan penyelidikan yang dipilih. Selain itu, perbezaan di antara konsepsi pembelajaran dan jantina serta konsepsi pembelajaran dan bidang pengajian juga dikenal pasti. Seramai 145 orang pelajar dipilih secara rawak dari Fakulti Perubatan dan Sains Kesihatan (FPSK) dan Fakulti Sains Sosial (FSS) untuk mengambil bahagian dalam kajian ini. Data dikumpul melalui soal selidik tinjauan yang diambil dari Conception of Learning Inventory (COLI) oleh Purdie & Hattie (2002). Keputusan kajian menunjukkan bahawa pelajar dari kedua-dua fakulti mempunyai pandangan yang kerap tentang konsepsi pembelajaran sebagai perubahan peribadi (C4: Personal Change) dan jarang melihat konsepsi pembelajaran sebagai suatu proses yang tidak terikat dengan masa dan tempat (C5: A process not bound by time or place). Selain itu, kajian juga mendapati bahawa tiada perubahan yang signifikan diantara konsepsi pembelajaran dan jantina. Walau bagaimanapun, terdapat perbezaan signifikan diantara konsepsi pembelajaran dan bidang pengajian berdasarkan konsepsi pembelajaran sebagai proses mengingat, menggunakan dan memahami maklumat (C2: Remembering, Using, Understanding Information) dan juga konsepsi pembelajaran sebagai perubahan diri (C4: Personal Change). Oleh itu, kajian ini menyimpulkan bahawa konsepsi pembelajaran adalah sangat penting untuk dikenalpasti di kalangan mahasiswa untuk membantu memudahkan proses pembelajaran mereka di universiti.*

## CHAPTER 1

### INTRODUCTION

#### 1.0 Introduction

Students have different conceptions about what learning means. Their belief of learning, past experience in learning, background, expectation of learning, value, instructional techniques, as well as learning environment can be the mix factors that influence how student conceive their learning. The conceptions of learning have been defined by Marton (1981, as cited in Duarte, 2006) as the student's natural understanding or interpretation of the learning phenomena. This is supported by Lai and Chan (2005) that defined the conceptions of learning as the beliefs and understanding held by the learners about learning. In addition, according to Vermunt and Vermetten (2004), the conception of learning is;

*“a coherent system of knowledge and beliefs about learning and related phenomena (e.g., knowledge and beliefs about oneself as a learner, learning objectives, learning activities and strategies, learning tasks, learning and studying in general, and about*

*the task division between students, teachers, and fellow students in learning processes)" p.362 .*

These conceptions of learning have been studied widely and researches suggested that it associated with the approaches to learning and the learning outcome (Boulton-Lewis et al., 2000). The example of the 3P model of learning from Biggs (1989) gives the conceptual framework that describes learning outcomes as a result of the interactions of the teaching and learning contexts with the student approaches to learning (Tam, 1999). Prior knowledge, abilities, values and expectations, ways of learning are some predispositions that students bring into the learning system which have influence on the way students decide to process academic tasks. In order for them to meet the demands of the teachers and the courses, they will be adopted a study approaches that they think will help them (Tam, 1999). In turn, which approaches that they take will affects the quality of their learning outcome.

Broadly, the two ways of relating to learning have become known as surface and deep learning approaches to learning. A process of accumulating the information in order to reproduce or applying it, are associated with a surface approaches of learning (Duarte, 2006). Students tend to accept the information and memorize it as isolated and unlinked fact, dealing with learning situations with minimal effort which lead to superficial retention of material for examinations and does not promote understanding or long-term retention of knowledge and information (Warren, 2004; Duarte, 2006). In other hand, deep approaches are related to qualitative conceptions of learning that has to do with comprehension and interpretation of meaning, involves the critical analysis of new ideas, understanding the information by linking them with their prior concepts so in the unfamiliar context, they can used it for problem solving (Warren, 2004; Duarte, 2006).

According to Fuller (1999), there will be differences between students who see learning as a process of memorising and reproducing learned material with students who see learning as a process of developing understanding of the learned material in context of their learning goals, the use of learning strategies and the achievement of different learning outcome. From their study, Kek et al. (2007) stated that the adoption of surface approaches to learning produce negative and poor quality processes and outcomes. In other hand, positive and better quality processes and outcomes resulted from the adoption of deep approaches to learning. Therefore, it is essential to determine how students conceive their learning and how



they go about their learning so that the students learning outcomes can be maximize (Boulton-Lewis et al., 2000).

## **1.1 Background of study**

The way students conceive the learning and how they go to organize their learning activity become the significant factors to the quality of their learning product. Marton et al. (1993, as cited in Duarte, 2006) has proposed a system of six conceptions that define learning. The following hierarchy organized the conceptions of learning framework which represent learning as: (a) increasing knowledge; (b) memorizing and reproducing; (c) the ability to apply knowledge; (d) understanding; (e) seeing things in different way; (f) changing as a person. The first three in the hierarchy implies the quantitative conceptions of learning which students basically focus on the process of reproducing or applying the materials with the minimal effort to understand it (Duarte, 2006). The latter three stated the view of learning as qualitative conceptions that intent to understand the materials of information for their own selves by critically relate the ideas with previous knowledge (Boulton-Lewis et al., 2000; Yong, 2010). Quantitative conceptions of learning explain the surface approaches of learning that students used which only concerned about ways to passing the examinations and what is required for assessment, without reflecting on purpose or strategies (Yong, 2010). Deep approaches that students adopt make them more curious to seek and make meaning from their learning. They are committed to learning where they can relate their prior knowledge to the subject materials (Deo & Phan, 2006). Good students (in term of performance) normally engage themselves in the processing of knowledge while poor performer is in superficial manner that use the surface approaches to their learning (Hessler & Jong, 1990). Identifying students' conceptions of learning enable students to become aware of their own conceptions as they are possibly modify how they go about their learning so that they get better learning outcome.

## **1.2 Problem Statement**

According to Lublin (2003), the formidable workloads during semester lead students to reorder their priorities in the things that they do so that the most immediately urgent things get done. They do not have time to become interested or get involved actively. In such case, surface approaches to learning will be adopted for them to cope and fulfil the requirement of

their various subjects with sole intention to pass the examination in the end of the semester. However, most of the time educators place high expectation to their students and required the students to adopt deep approaches to learning. This mismatch of conceptions of learning and their approaches with educators' expectation and activities in class will affect the learning outcome of the students.

Past research has revealed the significant of assessing the students' conceptions of learning and approaches to learning in order to make students aware of it and enable their possible modification (Duarte, 2007). Educators also can adapt instructional techniques to facilitate more productive learning when they know how the students conceive and goes about their learning (Boulton-Lewis et al., 2000).

Investigation of students' conceptions of learning may lead us to see the mix factors that influence their understanding and view about learning. Their belief in learning, perception of learning environment, background or reasons of study can contribute to these conceptions of learning which may affect the way they approaches the tasks. The conceptions of learning are worth to be identified because it helps to maximize students learning outcomes.

Identifying students' conceptions of learning help educators to aware of which conceptions is mostly held by students that lead to which approaches that they will take to conduct their learning process. Therefore, educators can find suitable instructional techniques that match with students' conceptions and as well facilitate meaningful learning. This identification of conceptions of learning also enables students to know their own conceptions of learning and find possible modification to their learning.

### **1.3 Research Objective**

#### **1.3.1 General objective**

The main purpose of this study is to identify UNIMAS' undergraduate students' conceptions of learning. In addition, the differences in conceptions of learning that exist among students based on selected demographic variables will also be identified.

### **1.3.2 Specific Objectives**

There are few specific objectives of this study that attempts:

- a) To identify which COL is mostly held by UNIMAS' undergraduate students chosen by selected sample.
- b) To identify which COL is least held by UNIMAS' undergraduate students chosen by selected sample.
- c) To determine the differences in conceptions of learning that exist among UNIMAS students based on genders
- d) To determine the differences in conceptions of learning that exist among UNIMAS students based on disciplines of study

### **1.4 Research Questions**

The main aims of the research are to attempt to answer the following questions:

- a) Which conceptions of learning are mostly held by UNIMAS' undergraduate students chosen by selected sample group?
- b) Which conceptions of learning are least held by UNIMAS' undergraduate students chosen by selected sample group?
- c) Is there is any differences in conceptions of learning among UNIMAS students based on genders in C1, C2, C3, C4, C5 and C6?

d) Is there any differences in conceptions of learning among UNIMAS students based on disciplines of study in C1, C2, C3, C4, C5 and C6?

1.5 Conceptual Framework

This section presents the conceptual framework that set out the variable. The relationship between the independent variable and dependent variable are briefly described in the figure below:

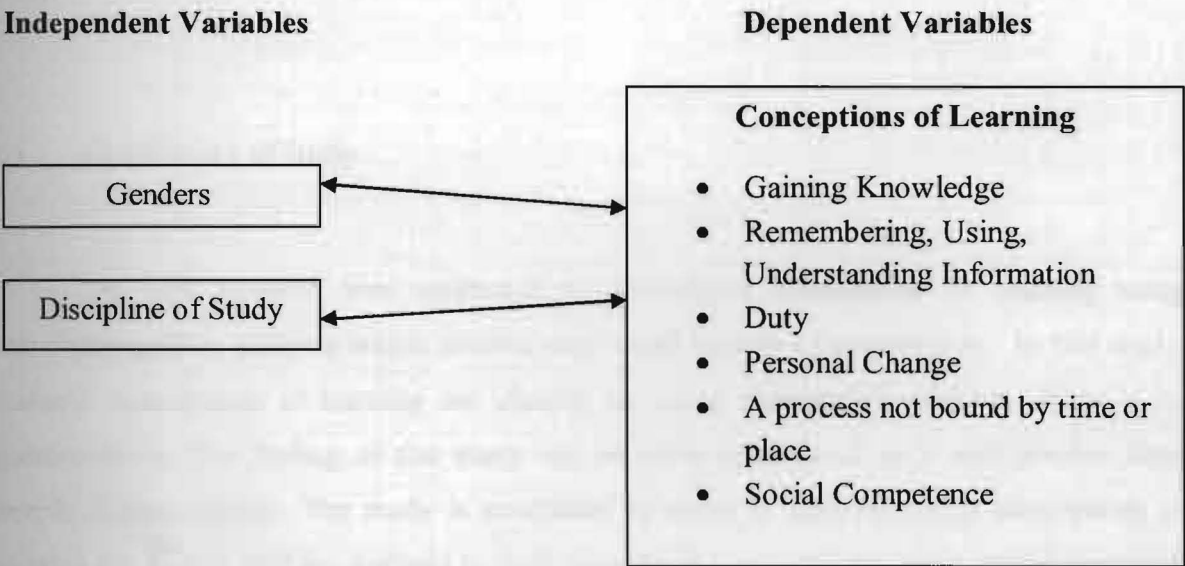


Figure 1.1: Conceptual Framework for the Study

The conceptual framework of UNIMAS’ undergraduate students’ conceptions of learning is illustrated based on the Conceptions of Learning Inventory (COLI) by Purdie & Hattie (2002). COLI is an instrument developed in order to test empirically a model of learning conceptions with larger group of participants. Based on the items in this instrument, which conceptions of learning is mostly held and least held by UNIMAS’ students will be identify.

There are two independent variables which are genders and discipline of study. Previous studies (Dart et al. ,1999; Kek et al., 2007) has conducted some research to find if there is significant differences in conceptions of learning based on gender where they found that mostly female students will have qualitative conceptions compare to male students.

The second variable is students' discipline of study. Students may have difference conceptions of learning when they study in different discipline of study. In present study, two faculties which are Faculty of Medicine and Health Sciences (FMHS) and Faculty of Social Sciences (FSS) that have difference discipline of study will be comparing to identify whether the differences in conceptions of learning exist among both faculties based on disciplines of study.

#### **1.6 Significance of study**

The past research was conducted to investigate conceptions of learning using phenomenographic analysis which involve only small sample of respondents. In this study, students' conceptions of learning are identify by using quantitative analysis which is by questionnaires. The finding of this study can be more generalized as it will involve large sample of respondents. The study is conducted in order to identify which conceptions of learning are mostly held by students in their learning. By indentifying these conceptions that students held, it will help educators to adapt instructional techniques that can facilitate more productive learning for their students. Students also can became aware of which conceptions that commonly their conceive in their learning and then can find possible modification in their learning approaches in order to maximize their learning outcome.



## **1.7 Definition of Terms**

### **1.7.1 Conceptions of Learning**

#### **Conceptual Definition:**

Conceptions of learning refer to a cluster of interrelated beliefs about different aspects of learning or can be describe as students' ideas and view about the nature of learning (Klatter et al, 2001).

#### **Operational Definition:**

Conceptions of learning can be divided into six conceptions based on conceptions of learning inventory (COLI) developed by Purdie & Hattie (2002) which are: (a) gaining information (INFO); (b) remembering, using and understanding (RUU); (c) a duty (DUTY); (d) personal change (PERS); (e) a process not bound by time or place (PROC); and (f) social competence (SOC).

The first three are focusing on quantitative conceptions of learning which students is likely to accumulate information and then reproduce or apply it. Qualitative conceptions of learning are the latter three that implies learning characteristic that involves construction of meaning (understanding) and personal change (Purdie & Hattie, 2002).

### **1.7.2 Science**

#### **Conceptual Definition:**

The word science comes from the Latin "scientia," meaning knowledge Science refer to a system of acquiring knowledge where in order to describe and explain natural phenomena, observation and experimentation will be use (Science Make Simple, 2006). Field of science are commonly classified into two major lines which are natural sciences and social sciences.

### **Operational Definition:**

Science in this context refers to science discipline of study in Faculty of Medicine and Health Sciences (FMHS). This faculty is classified as natural science discipline of study as it involves medical students and nursing students.

### **1.7.3 Humanities**

#### **Conceptual Definition:**

The term 'Humanities' comes from a Latin word 'humanus', which means 'human, cultured and refined'. The Humanities are the disciplines that including history, anthropology, literature, art history, ethics, philosophy and jurisprudence which help to understand and define culture, analysis and exchange of ideas rather than the creative expression of the arts or the quantitative explanation of the sciences (Digital Humanities, n.d; Meaning and Significance of Humanities, 2011)

#### **Operational Definition:**

Students from Faculty of Social Science (FSS) is refers as students who study in humanities discipline of study as it involve students from four department which are communication, anthropology and sociology, development studies, and politics and international relationship.

### **1.8 Chapter Review**

This chapter has discussed the background of what is conceptions of learning and the importance of understanding of conceptions of learning. Briefly, the problem statement, objectives of the study and research questions also presented. The significant of the study is to give readers the benefits of the study as well as picture of future study that can be extent from this study. In order to assist readers to have better understanding, the definition of terms



was included. The following chapter will bring readers into depth about the relationship of conceptions of learning and approaches to learning hence the product of the learning.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter will explain about literature review that related to the investigation of this study which covers prior research of conceptions of learning theoretical framework, and the differences of conceptions of learning based on genders as well as disciplines of studies.

#### **2.1 Conceptions of Learning and Approaches to Learning**

The basis for work in conceptions of learning was carried out by Marton and Saljo (1976, as cited in Warren, 2004) where students were asked to read part of chapters in the educational textbooks, and were told that they would subsequently be asked questions on that text. The intention of the study was to find out what they understood of the text. The students' answers and responses were analyzed and the outcome shows that the students adopted either surface approaches or deep approaches to learning. Deep approaches led to understanding the text and surface approaches were related to identifying which questions that they thought they would be asked later. The experience of learning (conceptions) and the ways of reading a text (approaches) seem to have relationship which then have been proposed